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BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER	
CHOI, PETER Y	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/840,755	TOPOLKARAEV ET AL.	
	Examiner	Art Unit	
	Peter Y. Choi	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-6,8,9,11,14 and 17-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-6,8,9,11,14 and 17-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 January 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

NON-FINAL ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on March 15, 2007, has been entered.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 2-6, 8, 9, 11, 14, and 17-28 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 6,514,602 to Zhao.

Regarding claims 2-6, 8, 9, 11, 14, and 17-24, Zhao teaches a personal care product comprising a biodegradable film formed from a stretched precursor film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film (see entire document including column 2 lines 60-67, column 3 lines 20-35, column 4 lines 55-69, column 7 lines 35-45). It should be noted that the biodegradable thermoplastic polymer and water-soluble thermoplastic polymer are present in the same layer so the Examiner submits that "blended mixture" is present as claimed by Applicants.

Regarding claims 2, 3 and 22, the biodegradable film has a water vapor transmission rate of at least about 1000 $g/m^2/24$ hours (column 7 lines 35-45).

Regarding claim 4, the biodegradable polymer is an aliphatic polyester (column 5 lines 40-69).

Regarding claim 5, the biodegradable polymer is selected from the group consisting of polycaprolactone, polybutylene succinate, poly(butylene succinate-adipate), polylactic acid, a terpolymer of terephthalic acid, adipic acid, and 1,4,-butanediol, and copolymers and mixtures thereof (columns 5 and 6).

Regarding claim 6, the water soluble polymer is selected from the group consisting of polyethylene oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and mixtures thereof (column 4 lines 55-69).

Regarding claims 8, 9 and 20, the biodegradable film has an elongation at break of greater than about 100% or greater than about 200% (column 7 lines 10-30).

Regarding claim 11, the biodegradable film includes from about 5% to about 30% water soluble polymer by weight of the biodegradable film (column 2 lines 60-69).

Regarding claim 14, the biodegradable film has a thickness of from about 0.1 to 0.3 mil (column 8 lines 1-30).

Regarding claims 17 and 18, the product is a disposable diaper, training pant, feminine pad, panty liner, incontinence product, wound dressing or delivery system (column 3 lines 30-45).

Regarding claim 19, the film is stretched from about 100 to about 500 percent of its original length (column 3 lines 20-35, column 7 lines 10-30).

Regarding claim 22, the stretched precursor film comprises a blended mixture of the biodegradable polymer and the water soluble polymer (column 2 lines 60-67, column 3 lines 20-35). It should be noted that the biodegradable thermoplastic polymer and water-soluble thermoplastic polymer are present in the same layer so the Examiner submits that "blended mixture" is present as claimed by Applicant.

Regarding claim 23, the water-soluble polymer is polyethylene oxide, polyethylene glycol, or a copolymer thereof (column 4 lines 55-69).

Regarding claim 24, the precursor film was stretched (column 3 lines 20-35). Although the Zhao reference does not appear to teach that the biodegradable film was stretched while in contact with an aqueous solution, the prior art structure is identical to the claimed structure. Therefore, the Zhao reference is deemed to anticipate the claimed limitation that the biodegradable film was stretched while in contact with an aqueous solution.

Regarding claims 25 and 26, Zhao teaches a personal care product comprising a biodegradable film formed from a stretched precursor film comprising a blended mixture of a biodegradable polymer and a water soluble polymer, wherein the water soluble polymer is polyethylene oxide, polyethylene glycol, or a copolymer thereof (see entire document including column 2 lines 60-67, column 3 lines 20-35, column 4 lines 55-69, column 7 lines 35-45). It should be noted that the biodegradable thermoplastic polymer and water-soluble thermoplastic polymer are present in the same layer so the Examiner submits that "blended mixture" is present as claimed by Applicants.

Regarding claim 26, the biodegradable film has a water vapor transmission rate of at least about 1000 $g/m^2/24$ hours (column 7 lines 35-45).

Regarding claim 27, Zhao teaches a personal care product comprising a biodegradable film formed from a stretched precursor film comprising a blended mixture of a biodegradable polymer and a water soluble polymer, wherein the precursor film was stretched (see entire document including column 2 lines 60-67, column 3 lines 20-35, column 4 lines 55-69, column 7 lines 35-45). Although the Zhao reference does not appear to teach that the biodegradable film was stretched while in contact with an aqueous solution, the prior art structure is identical to the claimed structure. Therefore, the Zhao reference is deemed to anticipate the claimed limitation that the biodegradable film was stretched while in contact with an aqueous solution. It should be noted that the biodegradable thermoplastic polymer and water-soluble thermoplastic polymer are present in the same layer so the Examiner submits that "blended mixture" is present as claimed by Applicants.

Regarding claim 28, Zhao teaches a personal care product comprising an outer cover layer, a liquid permeable liner layer, and an absorbent body between the outer cover layer and the liner layer, wherein the liner layer is bonded to the outer cover layer and to the absorbent body, the outer cover layer comprising a blended mixture of a biodegradable polymer and a water soluble polymer, and wherein the outer cover layer comprises from about 70% to about 95% biodegradable polymer by weight of the outer cover layer (see entire document including column 2 lines 60-67, column 3 lines 20-35, column 4 lines 55-69, column 7 lines 35-45, column 10 line 66 to column 11 line 44). It should be noted that the biodegradable thermoplastic polymer and water-soluble thermoplastic polymer are present in the same layer so the Examiner submits that "blended mixture" is present as claimed by Applicants.

In the event it is shown that Zhao does not disclose the claimed invention with sufficient specificity, the invention is obvious because Zhao discloses the claimed constituents and discloses that they may be used in combination.

Response to Arguments

4. Applicants' arguments filed March 15, 2007, have been fully considered but they are not persuasive. Applicants argue that Zhao fails to teach or suggest a biodegradable film formed from a stretched precursor film, a biodegradable film according to claim 22 wherein the stretched precursor film comprises a blended mixture of biodegradable polymer and water soluble polymer, and a biodegradable film having a WVTR greater than about 2500 $g/m^2/24$ hours.

Regarding Applicants' argument that Zhao fails to teach or suggest a biodegradable film formed from a stretched precursor film, Examiner respectfully disagrees. Zhao teaches that it is

extremely desirable for the film to have the ability to be stretched (column 3 lines 20-35). Applicants have not claimed any degree of stretching which would patentably distinguish the claimed invention from the Zhao invention. As Zhao teaches each of the structural and chemical limitations claimed (a biodegradable film formed from a stretched film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film), Zhao appears to anticipate the claimed invention.

Regarding Applicants' argument that Zhao fails to teach or suggest a precursor film formed from a blended mixture, Examiner respectfully disagrees. As set forth above, the biodegradable thermoplastic polymer and water-soluble thermoplastic polymer are present in the same layer so the Examiner submits that "blended mixture" is present as claimed by Applicants. Therefore, Zhao appears to anticipate the claimed invention.

Regarding Applicants argument that Zhao fails to teach a biodegradable film having the claimed WVTR, Examiner respectfully disagrees. Zhao teaches each of the structural and chemical limitations claimed (a biodegradable film formed from a stretched precursor film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film). Additionally, Zhao clearly teaches a WVTR of at least about 1000 $g/m^2/24$ hours which reads and includes the claimed ranges. As set forth in the Final Rejection of December 27, 2006, section 11, since the claimed range is not specific, absent unexpected results in the claimed range of greater than about 2500 $g/m^2/24$ hours and a limitless WVTR, the Zhao reference anticipates the claimed range.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2-6, 8, 9, 11, 14, 17-22, 24, 27, and 28 are rejected under 35 U.S.C. 102(b) as anticipated by USPN 5,200,247 to Wu.

Regarding claims 2-6, 8, 9, 11, 14, 17-22, and 24, Wu teaches a personal care product comprising a biodegradable film formed from a stretched precursor film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film (see entire document including column 1 line 59 to column 2 line 58, column 4 lines 3-67, column 5 and 6, Examples 1-6).

Regarding claims 2, 3 and 22, Wu does not appear to teach that the biodegradable film has a water vapor transmission rate of greater than about 2500 $g/m^2/24$ hours, greater than about 3000 $g/m^2/24$ hours, and greater than about 3500 $g/m^2/24$ hours. Although the prior art does not disclose the claimed water vapor transmission rates, the claimed properties are deemed to be inherent to the structure in the prior art since the Wu reference teaches an invention with a similar structural and chemical composition as the claimed invention (a stretched precursor film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film).

Regarding claim 4, the biodegradable polymer is an aliphatic polyester (column 2 line 62 to column 4 line 8).

Regarding claim 5, the biodegradable polymer is selected from the group consisting of polycaprolactone, polybutylene succinate, poly(butylene succinate-adipate), polylactic acid, a terpolymer of terephthalic acid, adipic acid, and 1,4,-butanediol, and copolymers and mixtures thereof (column 2 line 62 to column 4 line 8).

Regarding claim 6, the water soluble polymer is selected from the group consisting of polyethylene oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and mixtures thereof (column 4 lines 11-30).

Regarding claims 8, 9 and 20, the biodegradable film has an elongation at break of greater than about 100% or greater than about 200% (Examples 2 and 3).

Regarding claim 11, the biodegradable film includes from about 5% to about 30% water soluble polymer by weight of the biodegradable film (column 4 lines 22-30, Examples 1-6).

Regarding claim 14, the biodegradable film has a thickness of from about 1-10 mils (column 7 lines 1-17, Examples 1-4, Example 6).

Regarding claims 17 and 18, the product is a disposable diaper, training pant, feminine pad, panty liner, incontinence product, wound dressing or delivery system (column 1 lines 27-40, column 2 lines 50-54).

Regarding claim 19, the film is stretched from about 100 to about 500 percent of its original length (column 5 line 7 to column 7 line 17, Examples 2 and 3).

Regarding claim 22, the stretched precursor film comprises a blended mixture of the biodegradable polymer and the water soluble polymer (column 4 lines 22-30, Examples 1-6).

Regarding claim 24, the precursor film was stretched (column 5 line 7 to column 7 line 17, Examples 2 and 3). Although the Wu reference does not appear to teach that the biodegradable film was stretched while in contact with an aqueous solution, the prior art structure is identical to the claimed structure. Therefore, the Wu reference is deemed to anticipate the claimed limitation that the biodegradable film was stretched while in contact with an aqueous solution.

Regarding claim 27, Wu teaches a personal care product comprising a biodegradable film formed from a stretched precursor film comprising a blended mixture of a biodegradable polymer and a water soluble polymer, wherein the precursor film was stretched (see entire document including column 1 line 59 to column 2 line 58, column 4 lines 3-67, column 5 and 6, Examples 1-6). Although the Wu reference does not appear to teach that the biodegradable film was stretched while in contact with an aqueous solution, the prior art structure is identical to the claimed structure. Therefore, the Wu reference is deemed to anticipate the claimed limitation that the biodegradable film was stretched while in contact with an aqueous solution.

Regarding claim 28, Wu teaches a personal care product comprising an outer cover layer, a liquid permeable liner layer, and an absorbent body between the outer cover layer and the liner layer, wherein the liner layer is bonded to the outer cover layer and to the absorbent body, the outer cover layer comprising a blended mixture of a biodegradable polymer and a water soluble polymer, and wherein the outer cover layer comprises from about 70% to about 95% biodegradable polymer by weight of the outer cover layer (see entire document including column 1 line 59 to column 2 line 58, column 4 lines 3-67, column 5 and 6, Examples 1-6). It should be noted that Applicants have not associated structures corresponding to the absorbent body and the

liner layer. As Wu teaches that the film maybe extruded into two or three or more layers (column 4 lines 31-34), the outer extruded film is analogous to the claimed outer cover layer and the remaining layers of film are analogous to the claimed liner layer and absorbent body.

7. Claims 2-6, 8, 9, 11, 14, 17-19, 22, 24, and 27 are rejected under 35 U.S.C. 102(b) as anticipated by USPN 5,508,101 to Patnode.

Regarding claims 2-6, 8, 9, 11, 14, 17-19, 22, and 24, Patnode teaches a personal care product comprising a biodegradable film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film (see entire document including column 4 lines 3-39, column 6 lines 41-51, column 7 lines 9-51, column 8 lines 38-44).

Regarding claims 2-6, 8, 9, 11, 14, 17-19, 22, and 24, Patnode does not appear to teach that the biodegradable film was formed from a stretched precursor film. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art (a biodegradable film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film) is identical to or only slightly different than the claimed article. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. The burden has been shifted to Applicants to show unobvious difference

between the claimed product and the prior art product. The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if Applicants intend to rely on Examples in the specification or in a submitted declaration to show unobviousness, Applicants should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

Regarding claims 2, 3 and 22, and claims 8, 9 and 20, Patnode does not appear to teach that the biodegradable film has a water vapor transmission rate of greater than about 2500 $g/m^2/24$ hours, greater than about 3000 $g/m^2/24$ hours, and greater than about 3500 $g/m^2/24$ hours, and that the biodegradable film has an elongation at break of greater than about 100% or greater than about 200%. Although the prior art does not disclose the claimed water vapor transmission rates, the claimed properties are deemed to be inherent to the structure in the prior art since the Patnode reference teaches an invention with a similar structural and chemical composition as the claimed invention (a biodegradable film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film).

Regarding claim 4, the biodegradable polymer is an aliphatic polyester (column 4 lines 17-22).

Regarding claim 5, the biodegradable polymer is selected from the group consisting of polycaprolactone, polybutylene succinate, poly(butylene succinate-adipate), polylactic acid, a terpolymer of terephthalic acid, adipic acid, and 1,4,-butanediol, and copolymers and mixtures thereof (column 4 lines 17-22).

Regarding claim 6, the water soluble polymer is selected from the group consisting of polyethylene oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and mixtures thereof (column 4 lines 23-32).

Regarding claim 11, the biodegradable film includes from about 5% to about 30% water soluble polymer by weight of the biodegradable film (column 7 lines 47-51, column 8 lines 38-44).

Regarding claim 14, the biodegradable film has a thickness of from about 0.1 to about 250μm (column 7 lines 22-36).

Regarding claims 17 and 18, the product is a disposable diaper, training pant, feminine pad, panty liner, incontinence product, wound dressing or delivery system (column 6 lines 48-51, column 10 lines 24-31).

Regarding claim 19, Patnode does not appear to teach that the film is stretched from about 100 to about 500 percent of its original length. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art (a biodegradable film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film) is identical to or only slightly different than the claimed article.

Regarding claim 22, the stretched precursor film comprises a blended mixture of the biodegradable polymer and the water soluble polymer (column 7 lines 47-51).

Regarding claim 24, Patnode does not appear to teach that the precursor film was stretched while in contact with an aqueous solution, the prior art structure is substantially similar to the claimed structure. Absent a showing to the contrary, it is Examiner's position that the

article of the applied prior art (a biodegradable film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film) is identical to or only slightly different than the claimed article.

Regarding claim 27, Patnode teaches a personal care product comprising a biodegradable film formed from a stretched precursor film comprising a blended mixture of a biodegradable polymer and a water soluble polymer (see entire document including column 4 lines 3-39, column 6 lines 41-51, column 7 lines 9-51, column 8 lines 38-44). Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art (a biodegradable film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film) is identical to or only slightly different than the claimed article.

Claim Rejections - 35 USC § 103

8. Claims 2-6, 8, 9, 11, 14, and 17-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of USPN 5,549,775 to Odorzynski.

Regarding claims 2-6, 8, 9, 11, 14, and 17-28, in the event it is shown that Wu does not disclose the claimed water vapor transmission rates, Odorzynski discloses that it was known in the disposable diaper art to form a vapor permeable microporous film to be used in a disposable diaper wherein the vapor permeable film has a water vapor transmission rate of at least about 2500 $g/m^2/24$ hour, suitably at least about 3000 $g/m^2/24$ hours, and alternatively at least about 4200 $g/m^2/24$ hours (Odorzynski, column 1 lines 6-9, column 10 lines 18-66, Figure 2). It would

have been obvious to one of ordinary skill in the diaper art at the time the invention was made to optimize the water vapor transmission rate of the vapor permeable film, as taught by Zhao, to the claimed ranges, since discovering an optimum value of a result effective variable, here the water vapor transmission rate, involves only routine skill in the art and Odorzynski teaches that it was known in the art to form films in disposable diapers with the claimed water vapor transmission rates.

9. Claims 2-6, 8, 9, 11, 14, 17-22, 24, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Odorzynski.

Regarding claims 2-6, 8, 9, 11, 14, 17-22, 24, 27, and 28, in the event it is shown that the claimed water vapor transmission rates are not inherent to the structure of Wu, Odorzynski discloses that it was known in the disposable diaper art to form a vapor permeable microporous film to be used in a disposable diaper wherein the vapor permeable film has a water vapor transmission rate of at least about 2500 $g/m^2/24$ hour, suitably at least about 3000 $g/m^2/24$ hours, and alternatively at least about 4200 $g/m^2/24$ hours (Odorzynski, column 1 lines 6-9, column 10 lines 18-66, Figure 2). It would have been necessary and thus obvious to look to the prior art for conventional water vapor transmission rates for films. As Odorzynski provides this conventional teaching, it would have been obvious to one of ordinary skill in the diaper art at the time the invention was made to form the vapor permeable film, as taught by Wu and Zhao, with the water vapor transmission rates, as taught by Odorzynski, motivated by the desire of forming a durable and flexible film suitable for application as a vapor permeable film on a diaper.

10. Claims 2-6, 8, 9, 11, 14, 17-19, 22, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patnode in view of Odorzynski.

Regarding claims 2-6, 8, 9, 11, 14, 17-19, 22, 24, and 27, in the event it is shown that the claimed water vapor transmission rates are not inherent to the structure of Patnode, Odorzynski discloses that it was known in the disposable diaper art to form a vapor permeable microporous film to be used in a disposable diaper wherein the vapor permeable film has a water vapor transmission rate of at least about 2500 $g/m^2/24$ hour, suitably at least about 3000 $g/m^2/24$ hours, and alternatively at least about 4200 $g/m^2/24$ hours (Odorzynski, column 1 lines 6-9, column 10 lines 18-66, Figure 2). It would have been obvious to one of ordinary skill in the diaper art at the time the invention was made to optimize the water vapor transmission rate of the vapor permeable film, as taught by Patnode, to the claimed ranges, since discovering an optimum value of a result effective variable, here the water vapor transmission rate, involves only routine skill in the art and Odorzynski teaches that it was known in the art to form films in disposable diapers with the claimed water vapor transmission rates.

11. Claims 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu, as applied to claims 2-6, 8, 9, 11, 14, 17-22, 24, 27, and 28 above, in view of Zhao.

Regarding claims 23, 25 and 26, Wu does not appear to teach that the water soluble polymer is polyethylene oxide, polyethylene glycol, or a copolymer thereof. However, Wu teaches that the water soluble polymer may be polyvinyl alcohol, which is blended with the biodegradable polycaprolactone polymer. Zhao teaches a similar stretched biodegradable film comprising a biodegradable polycaprolactone polymer and a water soluble polymer, wherein the

water soluble polymer may be polyvinyl alcohol, polyethylene oxide, and polyethylene glycol (Zhao, column 4 line 57 to column 6 line 49). It would have been obvious to one of ordinary skill in the biodegradable film art to form the biodegradable film of Wu with a water soluble polymer which is equivalent to polyvinyl alcohol such as polyethylene oxide and polyethylene glycol, as taught by Zhao, since the substitution of known equivalent structures involves only ordinary skill in the art. One of ordinary skill in the biodegradable film art would be motivated to form the biodegradable film of Wu with polyvinyl alcohol or a known equivalent structure such as polyethylene oxide and polyethylene glycol to form a conventional, durable, and flexible biodegradable film suitable for diaper or sanitary napkin applications.

Regarding claims 25 and 26, Wu teaches a personal care product comprising a biodegradable film formed from a stretched precursor film comprising a blended mixture of a biodegradable polymer and a water soluble polymer (see entire document including column 1 line 59 to column 2 line 58, column 4 lines 3-67, column 5 and 6, Examples 1-6).

Regarding claim 26, Wu does not appear to teach that the biodegradable film has a water vapor transmission rate of greater than about 2500 $g/m^2/24$ hours. Although the prior art does not disclose the claimed water vapor transmission rates, the claimed properties are deemed to be inherent to the structure in the prior art since the Wu reference teaches an invention with a similar structural and chemical composition as the claimed invention (a stretched precursor film, comprising a biodegradable polymer and a water soluble polymer, wherein the biodegradable film comprises from about 70% to about 95% biodegradable polymer by weight of the biodegradable film).

12. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Zhao, as applied to claim 25 above, and further in view of Odorzynski.

Regarding claims 26, in the event it is shown that the claimed water vapor transmission rate is not inherent to the structure of Wu in view of Zhao, Odorzynski discloses that it was known in the disposable diaper art to form a vapor permeable microporous film to be used in a disposable diaper wherein the vapor permeable film has a water vapor transmission rate of at least about 2500 $g/m^2/24$ hour, suitably at least about 3000 $g/m^2/24$ hours, and alternatively at least about 4200 $g/m^2/24$ hours (Odorzynski, column 1 lines 6-9, column 10 lines 18-66, Figure 2). It would have been necessary and thus obvious to look to the prior art for conventional water vapor transmission rates for films. As Odorzynski provides this conventional teaching, it would have been obvious to one of ordinary skill in the diaper art at the time the invention was made to form the vapor permeable film, as taught by Wu and Zhao, with the water vapor transmission rate, as taught by Odorzynski, motivated by the desire of forming a durable and flexible film suitable for application as a vapor permeable film on a diaper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Peter Y. Choi
May 23, 2007

ANDREW PIZIALI
PRIMARY EXAMINER